Docket No. NEC 04P199 Serial No. 10/597,306 Amendment A

## **AMENDMENTS TO THE CLAIMS:**

Kindly amend claims 1, 4, 5, and 9, as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (currently amended): A circuit board having a plurality of through holes into which a plurality of leads of an electronic device are inserted and soldered with lead-free solder:

wherein a conductive film is formed on a wall surface of said through holes, and wherein a volume of a through hole of said through holes, into which an outermost end lead of said leads of said electronic device is inserted, is larger than a volume of a through hole of said through holes, into which a lead of said leads, which is located at a position nearest to a center of said electronic device, is inserted.

Claim 2 (original): The circuit board according to Claim 1, wherein a plane shape of each of said through holes is a circle, and wherein a diameter of said through hole, into which said outermost end lead of said electronic device is inserted, is larger than a diameter of said through hole, into which said lead at the position nearest to the center of said electronic device is inserted.

Claim 3 (original): The circuit board according to Claim 2, wherein the diameter of said through hole, into which said outermost end lead of said electronic device is inserted, is not more than twice the diameter of said through hole, into which said lead at the position nearest to the center of said electronic device is inserted.

Claim 4 (currently amended): A circuit board having a plurality of through holes into which a plurality of leads of an electronic device are inserted and soldered with lead-free solder: wherein a conductive film is formed on a wall surface of said through holes, and

HAYES SOLOWAY P.C. 3450 E. SUNRISE DRIVE,

SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET MANCHESTER, NH 03101 TEL. 603.668.1400 FAX. 603.668.8567

wherein a plane shape of a through hole of said through holes, into which a lead of said leads which is located at a position nearest to a center of said electronic device is inserted, is a circle, wherein a plane shape of a through hole of said through holes, into which an outermost end lead of said leads of said electronic device is inserted, is an ellipse having a major axis in a direction parallel with a line that connects a center of the corresponding through hole and a center position of said electronic device at a time of being mounted, and wherein a length of the major axis of said ellipse is longer than a diameter of said through hole, into which said lead at the position nearest to the center of said electronic device is inserted, and wherein the diameter of said through hole, into which said lead at the position nearest to the center of said electronic device is inserted, is at least as long as a minor axis of said ellipse.

Claim 5 (currently amended): A circuit board having a plurality of through holes into which a plurality of leads of an electronic device are inserted and soldered with lead-free solder:

wherein a conductive film is formed on a wall surface of said through holes, and wherein a size of a through hole of said through holes, into which an outermost end lead of said leads of said electronic device is inserted, the size being measured in a direction of a line that connects a position of said outermost end lead of said electronic device being mounted before being soldered and a center position of said electronic device at a time of being mounted, is larger than a size of a through hole of said through holes, into which a lead of said leads which is located at the position nearest to the center of said electronic device is inserted, the size being measured in any direction in a plane.

Claim 6 (original): The circuit board according to Claim 5, wherein an opening of said through hole into which said outermost end lead of said electronic device is inserted is formed by drilling more than once or by moving a drill relative to the board.

HAYES SOLOWAY P.C. 3450 E. SUNRISE DRIVE, SUITE 140 TUCSON, AZ 85718

TEL. 520.882.7623 FAX. 520.882.7643

175 CANAL STREET MANCHESTER, NH 03101 TEL, 603,668,1400 FAX. 603.668.8567

Docket No. NEC 04P199 Serial No. 10/597,306 Amendment A

Claim 7 (previously presented): The circuit board according to claim 1, wherein shapes of through holes of said through holes, which are located between said through hole, into which said lead at the position nearest to the center of said electronic device is inserted, and said through hole, into which said outermost end lead of said electronic device is inserted, are gradually changed from a shape of said through hole into which said lead at the position nearest to the center of said electronic device is inserted to a shape of said through hole into which said outermost end lead of said electronic device is inserted.

Claim 8 (previously presented): The circuit board according to claim 1, wherein a center position of said through hole into which said outermost end lead of said electronic device is inserted is shifted in a direction away from a center position of said electronic device at the time of being mounted, from a position of said outermost end lead of said electronic device, which is mounted before being soldered, when a thermal expansion coefficient of said electronic device is larger than a thermal expansion coefficient of said circuit board, and the center position is shifted in a direction approaching a center of said electronic device at the time of being mounted, from a position of said outermost end lead of said electronic device, which is mounted before being soldered, when the thermal expansion coefficient of said electronic device, which is device is smaller than the thermal expansion coefficient of said circuit board.

Claim 9 (currently amended): A circuit board having a plurality of through holes into which a plurality of leads of an electronic device are inserted and soldered with lead-free solder:

wherein a conductive film is formed on a wall surface of said through holes, and
wherein a center position of a through hole of said through holes, into which an
outermost end lead of said leads of said electronic device is inserted, is shifted in a direction
away from a center position of said electronic device at the time of being mounted, from a

HAYES SOLOWAY P.C. 3450 E. SUNRISE DRIVE,

SUITE 140 TUCSON, AZ 85718 TEL. 520.882.7623 FAX. 520.882.7643

175 CANAL STREET MANCHESTER, NH 03101 TEL. 603.668.1400 FAX. 603.668.8567

Docket No. NEC 04P199 Serial No. 10/597,306 Amendment A

position of said outermost end lead of said electronic device, which is mounted before being soldered, when a thermal expansion coefficient of said electronic device is larger than a thermal expansion coefficient of said circuit board, and the center position is shifted in a direction approaching a center of said electronic device at a time of being mounted, from the position of said outermost end lead of said electronic device, which is mounted before being soldered, when the thermal expansion coefficient of said electronic device is smaller than the thermal expansion coefficient of said circuit board.

HAYES SOLOWAY P.C.

3450 E. SUNRISE DRIVE, SUITE 140 TUCSON, AZ 85718 TEL. 520.882.7623 FAX. 520.882.7643

175 CANAL STREET MANCHESTER, NH 03101 TEL. 603.668.1400 FAX. 603.668.8567